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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,852	02/07/2005	Karl Frauhammer	3187	4409

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Striker Striker & Stenby
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EXAMINER

NASH, BRIAN D

ART UNIT PAPER NUMBER

3721

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/523,852

Applicant(s)

FRAUHAMMER ET AL.

Examiner

Brian Nash

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/7/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The title of the invention is not descriptive and is therefore objected to. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: DRILLING HAMMER HAVING AN EXTERNAL MECHANISM FOR SELECTIVELY SWITCHING OPERATION BETWEEN IMPACT DRILLING AND CHISELING MODES.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 10 and 12 the terminology “setting” is indefinite because it is not clear what applicant is claiming or what limitations are encompassed by the claim. It is suggested that setting be replaced “operation mode” in order to be consistent throughout the claim. Appropriate correction is required.

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In claim 1, line 11, the term “it” is indefinite because it is not clear what specific structural element is being referred, i.e. does “it” refer to the hammer tube or the switching mechanism? Appropriate correction is required.

In claim 1, line 17, the phrase “in the circumferential direction” is indefinite because it is not clear what applicant is claiming and the term circumferential appears contradictory to applicant’s specifications and drawings. Specifically, it appears that the locking spline would slide in an “axial” direction since it appears that to be “form-locked” into an axial recess, rotation of the actuator ring would be prevented while axial movement would be possible. Appropriate correction or explanation is required.

In claim 2, it is not clear whether one or two, projecting guide splines and axial guide grooves are included on the actuator ring and hammer tube, respectively. If it is preferable to have two, then the examiner suggests that applicant remove the text “includes at least one”. Claim 2 has been construed to define the preferred structure of two diametrically located guide splines and axial guide grooves.

In claim 3, the term “activating” is indefinite because it is not clear what it defines, i.e. does “activating” the control button define radial displacement or rotational movement? Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,236,588 to Moldan et al. Insofar as the claimed invention is understood, Moldan et al disclose the same drilling hammer.

With respect to claim 1, a drilling hammer comprising a hammer tube (3) that is rotatably supported in the housing (1), the tube driven by wheel (14) of gear unit (12, 14 – connected to motor not shown), striking piston (8) located in tube (3) that reciprocates, an operating mode change-over switch (21) for switching modes between impact drilling and only impact, i.e. chiseling, the change-over switch including a manually actuatable control button (22) and a switching mechanism (22a) that couples the hammer tube (3) to the driven wheel (14) when in the impact drilling mode and fixes the hammer tube in a non-rotative manner in the housing when in the chiseling mode (see column 5, lines 1-59). Wherein the switching mechanism includes an actuator ring (16) fixed on the hammer tube in an axially displaceable and torsion-proof manner (via spring 17 – see column 4, lines 50-60), the actuator ring including a radially projecting locking spline (16a) on its outer side, the locking spline designed to slide, in a form-locked manner into an axial recess (14a) in the drive wheel (14) and into locking toothing in the housing (see column 5, line 40 wherein ring 16 is locked to the housing via pins 27 and locking ring 26).

With respect to claim 10, an operating mode assigned by the control button (22) in which the actuator ring (16) is displaced such that the ring (16) is neither in torsion-proof engagement

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with the driven wheel nor in torsion-proof engagement with the housing (Fig. 2, see column 5, lines 15-31).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,236,588 to Moldan et al. As discussed above, Moldan et al disclose the invention substantially as claimed.

With respect to claim 11, Moldan et al. disclose a hammer drill in which a manually actuatable control button selects a drilling mode (column 3, lines 42-45 – see Fig. 1). However, Moldan et al do not explicitly disclose decoupling the striking tool by a sliding motion of the switching mechanism. Since Moldan et al do disclose three operation modes, i.e. a drilling mode, an idle mode, and an impact, i.e. striking only mode, it would have been obvious for one having ordinary skill in the art to recognize that the drilling mode of Moldan et al decouples the striking tool via the sliding motion of the control button since the “drilling mode” does not impart percussive forces.

Allowable Subject Matter

9. Claims 2-9 and 12-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

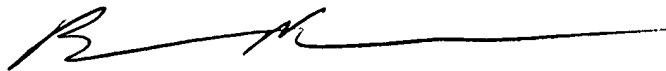
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Neumaier, Beccu, Frauhammer et al, Wu, Funfer, Saito et al, Droste et al and Kikuchi are cited to show related references.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Nash whose telephone number is 571-272-4465. The examiner can normally be reached on Monday – Thursday from 8 a.m. to 6 p.m.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached at 571-272-4467. The official fax number for this Group is: 571-273-8300

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/10/2006



Brian Nash
Patent Examiner
Art Unit 3721